

***Implementation of USAID's New Agricultural Assistance Strategy
Lviv Region***

March 11, 1999

Lviv Oblast Implementation Plan

I. New USAID Agricultural Assistance Strategy

Until there is more generalized progress in agriculture policy reform in Ukraine, USAID has decided to concentrate its assistance in three or four geographical areas where it believes more development is possible. In these areas assistance will be focussed on private farmers, household food producers, evolving private farming systems, and private sector support services needed by these target groups.

USAID will continue to support national agricultural policy reforms, but primarily through its regional activities, and through other policy analysis and assistance to institutions supporting reform nation-wide. This contrasts with USAID's previous approach, which supported activities nationwide that attempted to advance key agricultural reforms, relying largely on supporting the private sector and direct attempts to foster policy change at the national level.

USAID plans, through this regional concentration to:

- Encourage private farming at all levels -- households, private farms and intermediate farm structures that show promise of evolving into private farms.
- Encourage individuals and groups to undertake private or cooperative farming through the process of large farm restructuring and issuance of land titles.
- Support sustainable, private supply and marketing services that provide private farmers, private plot holders and restructured farms with: production inputs (seeds, chemicals, fertilizers, feeds, machinery, etc.); open markets for agricultural products; farm management and marketing information; and sustainable credit systems.
- Promote linkages between private farmers, distributors, grain elevators and other private support services.
- Support private sector efforts to influence national agricultural economic policy deliberations, through support to professional and trade associations and policy analysis institutions that support reform.
- Sustain the welfare of individuals in rural areas, specifically smaller private farmers and household plot owners, during what may be a protracted period of uncertainty about agricultural reform.

II. Overall Strategy Implementation Rationale

Discrete, complementary projects by USAID and other donors are underway in each targeted Oblast. Each activity on its own will have some benefits. USAID believes, however, that greater success is possible if a more intensified, coordinated effort is made. Consequently, USAID will require that implementors work together in each region to carry out their activities. This new coordinated effort includes the following:

- A shift of implementer staff to the regions.
- Staff of all implementers will work to the maximum extent possible in the same or contiguous offices.
- A working group will be established with membership to include Oblast and Raion officials, USAID and implementer staff, other donor program representatives in the Oblast and appropriate private sector members.
- These arrangements will continue until a new Regionally-based project is put in place by USAID, which will be under common management, early in 2000.

III. Specific Objectives in the Lviv Region

A. Overall Objectives

Lviv and Western Ukraine in general have more private land ownership (30% - 40%) than other regions of Ukraine (5% - 15%). There is also a tendency for Collective Agricultural Enterprises (CAEs) to dissolve into private structures more rapidly than elsewhere. USAID programs in farm restructuring, land titling and other support services have made more progress here than elsewhere. This reflects the fact that the local and regional authorities have supported agricultural reform.

USAID's overall objectives in Lviv are to capitalize on these positive aspects and to accelerate and strengthen its assistance to private support services and land privatization. Through these measures USAID intends to increase the well-being of farmers, those engaged in agricultural support services, and consumers in Lviv and Western Ukraine, and to demonstrate the effectiveness of agricultural reform.

B. Implementing Organizations

The following USAID-financed organizations are currently providing assistance to agriculture in Lviv Oblast.

- RONCO Corporation: Land titling, farm restructuring, post farm restructuring and business management support to selected processors of farm products;
- Citizens Network for Foreign Affairs (CNFA): Agribusiness Partnerships in input supply, and processing;

- Land O'Lakes (LOL): Business association training and cross-border trade promotion;
- Chemonics Corporation: Commodity exchange development and marketing;
- Price Waterhouse/Coopers (PWC): Elevator privatization;
- Agricultural Corporation for Development International/Volunteers for Overseas Cooperation and Assistance (ACDI/VOCA): Cooperative development and agricultural credit training;
- Ukrainian Agricultural Development Company (UADC): Input dealer financing; and
- Iowa State University (ISU): Data collection and policy analysis.

These organizations will form the core of the assistance program in Lviv. They will work closely with other US and USAID assistance such as providers of Development Assistance International (DAI)/NewBizNet-business services, Western/Newly Independent States (W/NIS) -financing and business services and with other donor assistance programs.

All of these activities (except IPR/ISU) will end over the coming year, although not all at the same time. Two important activities that will continue through this period and effectively form the "bridge" to the new project are the RONCO farm restructuring and the CNFA agribusiness partnerships.

IV. Description of Activities on Proposed for Lviv

Under the overall coordination and direction from USAID, these specific activities will be undertaken.

A. Creation of Private Farms

Over the period 3/99-3/00 the RONCO project will issue 40,960 land titles in Lviv Oblast: 20,600 in Peremyshlani raion, 17,400 in Radekiv, 1,833 in Zhovkva, and 18,360 in Yavoriv. Based on experience so far, the majority of new titleholders will lease their land to new intermediate farm structures. To enable existing private farmers and operators of household plots to expand their land holdings, RONCO will place special emphasis on issuing land titles to CAE members who want to lease land to private farmers. Financial support for issuing these titles will be provided even if the farm is not restructured. The managers of new enterprises will be trained by RONCO's Farm Management and Business Development group (FMBD).

Some new titleholders are expected to form smaller, private farms. These agricultural entrepreneurs have been the main participants in the LOL project in Lviv for two years. Using already identified and experienced trainers from Poland, Lithuania, and Ukraine and course material on accounting, marketing, negotiating and planning, LOL will provide courses, workshops and seminars to teach the basic elements of farm and business management in a market economy. This training will coincide with farm restructuring and titling activity.

CNFA agribusiness partners will share their expertise with private farmers and farm workers who would like to become private farmers. The training courses and seminars will be conducted to provide a necessary knowledge of farm management and agribusiness.

Relevant extension services will also be provided by five agricultural extension offices opened by TACIS in Lviv Oblast.

B. Input Supply

CNFA is working in Lviv Oblast with American Cyanamid, AgroEvo and UADC to expand private input distribution. Technical assistance funds and training will be provided in business management, product use, storage and safe disposal of agro-chemicals and other inputs, and demonstration trials will be undertaken. Through UADC, credit financing for input suppliers is also being made available. CNFA will encourage suppliers and private input dealers to supply the restructured farms and private farmers assisted by RONCO. CNFA will also develop one or more Private Farm Commercialization project that will supply other inputs, including machinery. To the maximum extent feasible, these activities will be targeted to private farmers, restructured farms and private plot holders in the targeted raions.

LOL has identified and worked with five private farmers who are leaders in their villages (in the raions of Sokol, Zhovkva, Kamyanka-Buska, Radekiv) and have formed an associations. Working with a TACIS program assisting co-operatives, one of these associations will be transformed into an input supply/marketing cooperative, linked to a CNFA partner distributors.

In the five targeted raions, as well as others in the Oblast, Chemonics will assist the Information Resource Center (IRC) to refine its ability to identify the production input requirements of private farmers and individual plot holders. IRC is a private commodity marketer and input supplier that focuses on peasant plots and private farmers. Currently, IRC has over 70,000 input supply and marketing contracts in the Oblast with such clients.

A market survey of the individual clients of the IRC is being conducted with IRC, CNFA and UADC clients. Chemonics will work with village councils served by the IRC to CNFA others to strengthen input, output and credit market linkages of these private producers.

As part of its land titling and farm-restructuring, RONCO will provide information to private farmers regarding these and other input suppliers or output processors. For farms receiving intensive restructuring assistance, RONCO will work with CNFA or output processors and Chemonics to assist farms to secure inputs and markets.

C. Marketing, Processing and Storage

Chemonics will support general development of grain markets in the Lviv Area and the development of marketing structures that meet private farmer needs. It will provide assistance to the Information Resource Center, assisting it in the formation of marketing cooperatives, strengthening private farmer and plot holder access to markets, and strengthening the contractual linkage of these producers with private processors. Special attention will be given to farms where RONCO is providing land titles.

Grain enterprise privatization (including elevators) support will be provided by Price Waterhouse/Coopers. A privatization specialist will work with elevators on share registration, transfer of shares to suppliers, share sales, and shareholder rights. Special efforts will be made to

identify RONCO-assisted shareholders in targeted raions and to ensure full (100%) elevator privatization, where possible.

For small producers, LOL village leaders will be a starting point for the development of marketing associations. They will be assisted in using the commodity exchanges by Chemonics and the grain elevators privatized by Price Waterhouse/Coopers.

D. Technical Advice and Extension Services

RONCO Ukrainian specialists will assist selected farms to improve on-farm production efficiency through technical advice and information. A post restructuring team will advise on farm operational and managerial techniques to reduce production costs and more efficient use of inputs. Farm Management and Business Development teams will target restructured farms, existing private farms, small plot holders and selected food processing companies that can provide markets and credit to private farmers. Demonstration activities will be undertaken for crops and processing. RONCO, CNFA and Chemonics, will assemble information on input suppliers, including financial institutions that provide credit to farmers and processors. CNFA-cooperating input suppliers will be encouraged to work with private farmer clients.

Farmer to Farmer (FTF) volunteer programs through CNFA, Winrock, ACDI/VOCA and LOL will bring American farming and agribusiness experts to the Oblast to work with farmers and agribusinessmen. Volunteers will be assigned to targeted farms and businesses identified through this strategy. The FTF program will provide about 25 percent of all volunteers (about 30 per year) to the Lviv region.

E. Rural Credit

There are sources of credit in the Oblast -- the Western NIS Enterprise Fund, MetaCenter, local credit unions and UADC. The Eurasia Foundation, the World Bank, and ACDI/VOCA project (using commodity monetization proceeds) are potential new sources for 1999. Implementing organizations will advise private farmers of these possible sources of credit. RONCO, CNFA and UADC will also serve to expand the availability of inputs on credit to private farmers.

The ACDI/VOCA has provided credit training and technical assistance to the Western Ukraine Commercial Bank (WUCB) and to credit unions in the region, its activities will be expanded with new credit funds.

ACDI/VOCA has also organized training seminars for credit unions associated with the World Council of Credit Unions (WOCCU) in Ukraine. A special effort will be made to develop a new farmer credit program in Lviv Oblast to support this regional effort.

F. Policy Reform

The Iowa State University Policy Analysis advisory team will continue active support on key policy issues in Kiev, but will also provide analysis relevant to policy issues in Lviv. A dialogue will be maintained between implementers in Lviv and the Policy Analysis Project to ensure that

issues of importance to the Oblast are addressed. In Lviv Oblast policy issues, as they arise, will be raised by all USAID implementors and will be considered during monthly meetings of the Oblast Working group (See below).

Influence on policy issues will be exerted by LOL's Food Processors Association, and Chemonics analysis and recommendations regarding the application of laws and regulations in the region. CNFA will collect and utilize information provided by agribusiness partners on constraints and problems faced. RONCO will continue to address regional land issues and also collect relevant information via the intensive farm activities and market surveys conducted.

V. Integration of Raion Activities

Collaboration among projects in each of the selected raions in Lviv Oblast is envisaged as follows:

A. Radekiv Raion

The Agricultural Land Share (RONCO) project will issue 17,400 land titles in Radekiv raion as 32 farms are restructured. Five of these farms will be selected for intensive post-restructuring assistance, consisting of: 1) farm demonstrations; 2) helping farms and farm enterprises with the planning and execution of production and value-added activities; and 3) providing support for the establishment of marketing linkages to processing facilities. RONCO will also assist other private farmers in producing for local processing.

On three of the farms selected for intensive post-restructuring assistance, Land O'Lakes will provide training in: 1) farming as a business; 2) farm record keeping; and 3) farm management in a market economy. To assist with grain marketing in the raion, Price Waterhouse/Coopers will privatize one or more grain enterprises to a minimum of 70 percent and to 100 percent if feasible. PWC will also work with the grain enterprise and the farms being restructured with RONCO assistance to ensure active shareholder involvement and to enable farmers to receive better service from the grain enterprise. CNFA will support private farm production through input suppliers in the raion including supplying inputs to newly private and existing private farmers. Special attention to input supply will be given to the five restructured farms provided post privatization assistance. CNFA will also enable private farmers or private farm groups receiving intensive post-restructuring assistance to become collaborators in a small scale mechanization service center program being developed with AGCO and other machines suppliers.

After a marketing survey in the raion, Chemonics will work with the Oblast Information Resource Center to develop input and marketing agreements with household plot holders, and assist in the establishment of local cooperative marketing organizations. Plot holders on restructured farms will also receive special support to develop marketing agreements and in cooperative/association formation. ACDI/VOCA Farmer-to-Farmer volunteers will also be supporting cooperative development efforts.

Chemonics will develop a marketing strategy for the Lviv area that identifies opportunities for producers and processors in Radekiv Raion. RONCO and CNFA will work with one or more

processors to identify markets for private producers in the Raion and to assist producers in reaching those markets.

ACDI/VOCA agricultural finance personnel in the region will train selected staff in implementor organizations on how to locate credit sources.

Farmer-to-Farmer volunteers will be utilized to address specific technical and management issues for three groups: private farmers, restructured farms and land share holders from those farms and private agribusinesses.

B. Peremyshlyani Raion

The agricultural potential of Pereyshlyani Raion is limited. Assistance will be provided through issuing of land share titles -- 20,600; through support to household and private farmer production and marketing to raise incomes and through consideration of other market opportunities.

C. Zhovkva Raion

In Zhovka raion 14 farms will be restructured by the Agricultural Land Share Project, and 1,833 land titles issued. Three of these farms will receive intensive post-restructuring assistance.

Program assistance in the raion will be largely the same as in Radekiv. However, a horticultural processor will be a focus for marketing and processing assistance, with the expectation that near-by private farmers will provide raw materials. Household plot holders will also be encouraged to produce commodities for processing.

D. Yavoriv Raion

In Yavoriv raion a total of 22 farms will be restructured and 18,360 land titles issued, with other assistance provided as in Radekiv.

VI. Coordination and Reporting

A. Oblast Working Group

Continuous involvement, information exchange and cooperation/collaboration are necessary if this complex effort is to be successful. An Oblast Working Group OWG, will be established. Membership will include senior level Oblast and Raion officials, OWG USAID, USAID Grantees and Contractors, other donor program representatives in the Oblast and private sector members. The group will meet monthly to exchange information, review project implementation, discuss and resolve issues impeding progress, and identify issues that need to be raised with the National

Government. USAID will coordinate with this Working Group and provide support to it. It is anticipated that the OWG will be chaired by an Oblast Official.

B. Program Coordination

USAID will assign a coordinator for the Lviv region. USAID contractors/grantees will assign staff to the above-mentioned OWG which, along with representatives of the private sector, will coordinate project work in the oblast. This group will meet weekly to coordinate implementation as needed.

Background Information on Lviv Region

Lviv Oblast will be one of the first areas in which the new strategy will be implemented. Reasons for the selection of Lviv are:

Support of local officials for farm restructuring, land privatization and private farming:

Agricultural land privatization in Lviv began in 1993 and the Oblast now has the highest proportion of private agricultural land ownership in Ukraine. The Oblast administration and Rada are committed to provide agricultural inputs to private producers and in 1999 private producers are scheduled to receive more financial assistance than are former collective farms. In two raions -- Radekiv and Peremyshlani -- the local and Oblast administrations show signs of being willing to work proactively to: 1) support issuance of state deeds of private land ownership to all eligible recipients and restructure all farms in the raions; 2) ensure a competitive environment for private sector input suppliers; 3) guarantee that the government will honor private input supply and product marketing contracts; and 4) eliminate issuance of production directives to farmers.

Existence of cooperatives or private farmer's associations, or a strong interest by private farmers: A TACIS project has registered five cooperatives. There is a milk cooperative in Striiskii raion. The Oblast Dairy League includes 14 private dairy processors. There are private farmers associations in every raion. There is also an Oblast level private farmers association and Lviv Agricultural Chamber has recently been formed.

Ukrainian private sector agribusiness dealerships and distributors: The Information Resources Center, a private input supplier that focuses on peasant plots and private farmers, currently has over 70,000 commodity marketing and input supply contracts in the Oblast.

Private agribusiness activity, including foreign, delivering new technology: From 1991-98 there has been \$28.8 million of foreign investment in agriculture (one-third of total foreign investment in the Oblast). Food processing accounts for 90 percent of the investment. Most of the investment comes from the Netherlands, Cyprus and Great Britain. There are two large, new private meat processing plants and almost every raion has at least one small private meat plant and a mini flourmill.

Availability of, or feasibility of creating, sources of farm and enterprise credit: There are a network of urban and rural credit unions but for all practical purposes these organizations are incapable of providing credit to private farmers, processors or traders.

Progress in privatization and demonopolization, e.g. elevators and input supply: All of the grain elevators have begun share sales although none have been privatized to date. All UkrAgroKhim enterprises have begun share sales with over half having sold at least 70 percent and eight enterprises fully privatized. Of 42 UkrAgroTechService enterprises, 36 have sold at least 70 percent and 33 have been fully privatized. In addition numerous milk, meat and fruit processors have been privatized.

Share of private land (farms and households) in the Oblast: Nearly 40 percent of the land is private hands. There are about 347,000 individual private plots whose average size is 1.5 hectares while there are xxxx private farms totaling 22,415 hectares.

Presence of commodity exchange and other private, marketing channels. Lviv Oblast has the Western Ukrainian Regional Commodity Exchange and the Information Resource Center (mentioned above). In the city of Lviv there are 15 official wholesale food bazars and another 30 in the Oblast. There are an estimated 150 unofficial food bazars in Lviv and another 600 in the Oblast. There are 30-45 large food wholesalers in the Oblasts. There are no local wholesalers dealing with fruits, vegetables, poultry or meat. There is one large private wholesaler dealing with milk products. There is an extensive network of unregistered private wholesalers/marketers.

Annex II - Current USAID Assistance in the Oblast and General Future Plans

The current USAID agricultural program in Lviv Oblast, adjustments and new initiatives in the region are as follows:

1. Private Land Ownership and Farm Restructuring: Securing legal title to farm land and restructuring farms into viable private enterprises are fundamental building blocks of the strategy. The Agriculture Land Share Project, implemented by RONCO, is providing these services in an intensive way in the Oblast. In Peremyshlani raion the CAEs have collapsed and restructuring is not relevant. All farms in Radekiv, Kamyanka Buska and Zhovkva raions have been restructured into private sector entities. Some 75 farms had been restructured. While only 2,252 titles have been issued, nearly 27,000 titles will be issued in the next 2-3 months.

A more intensive approach to farm restructuring and title issuance is also being initiated by RONCO. Until now the emphasis has been on rapid restructuring and issuance of land titles. This has not seriously changed the operating efficiency of farms, nor their ability to generate employment and incomes. The land titles have resulted in relatively few people undertaking private farming, or forming groups of private farmers. Most recipients have leased their land back to former farm managers.

A process of farm selection will also be undertaken to determine which farms in which locations will receive concentrated attention, not only by RONCO but also by other activities in the region.

RONCO will continue to provide a post restructuring team in Lviv that will investigate production/processing possibilities on private and restructured farms and how to link these farms with other agricultural input and marketing activities supported by USAID (CNFA, UADC, LOL/ACDI) and other donor activities (TACIS, World Bank).

2. Supply of Agricultural Inputs and Extension Services to Farmers: Inputs and marketing are a second critical element in expanding the numbers and productivity of private farmers. Under existing (CNFA) agribusiness partnerships, three American companies (American Cyanamid, UADC and AgrEvo) have Ukrainian distributors working in Lviv Oblast.

Closer links will be developed to insure that agriculture inputs and extension services are provided to restructured and other private farms being titled. This will be done through existing and developing distributors and dealers of CNFA partners, Raion Private Farmers' Associations, village leaders and current, successful, private farmers. Other proposals are under development through the Private Farm Commercialization effort of the CNFA project to link private farmers, household plots and restructured farms to private agricultural markets. Contract farming schemes, farm leasing activities, agro-processing linkages, and possibly franchise projects will be examined. A farm input supply cooperative activity is also under consideration.

3. Rural Credit: The lack of credit to private farmers and small agribusinesses is a major constraint on all agricultural and agro-industries in Ukraine, and it will be in Lviv Oblast. Through the Land O'Lakes subgrant to ACDI/VOCA, the Western Ukraine Project initiated a small, credit training program in the Oblast. Training will continue in this and other identified regions, while a new credit mechanism is being developed with the West Ukraine Commercial Bank and several credit unions linked to a planned World Bank Rural Finance Project that comes on stream in late 1999.

The CNFA-supported UADC is active in the Oblast in providing supplier credit. UADC is the Ukraine Agricultural Development Company, and its purpose is to establish a private agricultural entity in Ukraine that will work with approved Ukrainian distributors and traders to increase agricultural lending. The USAID-provided funds via CNFA are supporting the training of Ukrainian staff of the UADC, financing the procurement of essential office equipment and supplies, and funding a portion of the salaries of key UADC staff working on the development activities of the project, specifically credit analysis, a credit information system and a farm equipment leasing scheme. In Lviv, Gaben and UkrAgrobusiness are UADC approved distributors.

Additional credit activity could come from the Western NIS Enterprise Fund, which has an office and is active in the Oblast (see below), and the Eurasia Foundation.

4. Marketing: For private farmers and restructured farms, access to markets is essential and has been a major impediment to successful development of both. The Chemonics (commodity exchange) project will assist with the development of grain marketing in the Oblast

and the more general development of marketing structures that can meet private farmer needs. The privatization of grain elevators and the broader assistance to privatization being provided through Price Waterhouse/Coopers are additional elements of creating marketing structures available to private farmers. Both these activities will continue until June 30, 1999, by which time it is expected that a more effective approach to marketing in this area of regional concentration will have been developed.

Chemonics will also assist in developing a more coherent approach to meeting the marketing needs of private farmers and plot holders by identifying marketing constraints and opportunities, and then assisting in the development of marketing strategies. This will involve intensive survey work, followed by a communication and training program with the private farmers and plot holders. Chemonics will wrap up the marketing activity by developing a report on its findings and providing the Lviv Working group with strategies to deal with issues identified.

5. Business Training: The LOL Western Ukraine Initiative is an effort to address a number of development needs in the Oblast. Land O'Lakes provides training and technical assistance to private agribusinesses and associations along with significant trade promotion efforts. NewBizNet, operated by DAI, offers full business center services. Chemonics training staff will provide seminars to private farmers and plot holders on how to benefit from opportunities in the input, output and credit markets.

6. Data Collection and Policy Analysis: Survey, policy, analytical and evaluation work in the Oblast is being carried out by the Ukrainian Agricultural Policy Project, implemented through Iowa State University (ISU). It is expected that the Agricultural Policy Unit of the MAIC and the IMCAR secretariat will also be woven into the work in this region.

Other, related USAID-funded programs in Lviv

1. The Western NIS Enterprise fund has an office in the center of Lviv. In this office, qualified Ukrainian businesses large and small can apply for loans. Terms are competitive. Participants in USAID projects do not receive special advantages in borrowing, but the training provided by the programs and the technical assistance from them can be very helpful in preparing loan applications and business plans.

2. NewBizNet is a full-service business center in Lviv. It provides services to businesses and institutions both for fees and gratis. In the policy area, the center is involved in the work of a number of city and Oblast councils and committees involved with issues of economic development and entrepreneurship. In training, the center provides a variety of courses to individuals and groups and has an employment agency. Its consulting services have focused on market research and business start-ups.

3. The Meta Center is a business incubator. It has a small business loan program and provides a number of services to small businesses. There is a full list of training courses,

individual consulting services, and modern, well-equipped office space for rent. All of their work is for-fee. The CounterPart Consortium operates the Center.

Other, related non-USAID-funded programs in Lviv Oblast include:

1. The European Union through TACIS (Technical Assistance to the CIS) operates two relevant projects in Lviv. The first is called the Agency of Agricultural Restructuring and Development. The goal is to provide agricultural extension services to the Oblast. Five extension centers have been opened-- in Stree, Kamenka-Buska, Busk, Hordok, and Drohovich. Each office is in the process of selecting a "pilot farm" with which to work.

2. The second TACIS-funded project is called the Agency of Agribusiness and Market Development. It operates as part of the Oblast's Center for Privatization. Its goal is create partnerships for agricultural producers and processors. To date, it has formed five registered cooperatives-- in Stree, Sokol, Sambir, Zidachev, and Pustomatib.

Annex III Basic Background Information on Lviv Oblast and Agricultural Production in the Oblast

Performance of the agricultural sector in Lviv Oblast has mirrored the performance of the agricultural situation throughout Ukraine. The agricultural sector of Lviv has been in decline for several years. The overwhelming majority of the large farms are unprofitable. Some privatization has taken place, former state and collective farms have restructured, and there are a number of small private farmers in the region. Production on household plots has risen substantially in recent years.

There are some signs that the market forces are starting to affect agricultural decision making. For example the crop mix has changed slightly in favor of crops which are profitable (food wheat) and away from those that are not (sugar beet). State controls and the remnants of the soviet system, however, remain more powerful than market forces in Lviv's agricultural sector.

Population

The population of Lviv Oblast is 2,750,600. Of that figure, 1,674,100 (61 percent) are urban dwellers, and 1,076,500(39 percent) live in rural areas.

Ownership of Agricultural Enterprises.

Private Farms: There are between 1500 and 2500 private farms in Lviv farming an area totaling 22,415 hectares.

Land Leasing: In 1997, 1,200 hectares of arable land (0.3 percent of the total available to be leased) were registered as leased.

Household Plots: In 1997, there were 482,100 thousand household plots in Lviv Oblast, roughly the same number as in 1991 when there were 486,600 household plots. This accounts for 4.2 percent of all household plots in Ukraine.

What changed during those years is the average size of the household plot, which increased from .334 hectares in 1991 to .535 hectares in 1997. The national average is .374 up from .3 hectares in 1991.

These household plots account for an increasing share of agricultural production in Lviv, as has happened throughout Ukraine. In 1997 (compared with 1991), Lviv's household plots accounted for 95 percent (44 percent in 1991) of vegetable production, 78 percent (52 percent) of egg production, 87 percent (50 percent) of milk production, 76 percent (40 percent) of meat production, 23 percent (3 percent) of grain production, and 26 percent (less than 1 percent) of sugar beet production.

Crops

Grain: In 1995-1997, the average grain harvest in Lviv was 723,000 tons, accounting for about 2.3 percent of Ukraine's total grain harvest. Winter wheat and spring barley account for most of the grain produced in Lviv, at about 53.0 and 23.0 percent of total grain produced, respectively.

Since 1990, the overall grain harvest in Lviv is down from 1,009,700 tons to 686,100 tons in 1997, a decline of 32 percent. This is little surprise, given the national grain harvest decline of 30 percent. Production in almost all grain categories has declined, except for spring wheat. It appears that farmers are replacing plantings of lower value feed crops for higher value wheat crops.

Although data is only available through 1995, it is clear that the private sector is playing an increasingly important part in grain production. Throughout Ukraine, privately produced grain accounted for 9.6 percent of the harvest in 1995, up from 3.0 percent in 1990. In Lviv, privately produced grain accounted for 14.3 percent of the total grain harvest in 1995, up from 1.9 percent in 1990. These percentages are likely to have grown higher in recent years as the area sown by private farm entities has risen.

Sugar Beet: Significant amounts of sugar beet are produced in Lviv. In 1990, 3.6 percent, or 1,597,370 tons of Ukraine's sugar beet were grown in Lviv. By 1997, Lviv was still responsible for 3.0 percent of Ukraine's sugar beet, however the size of the sugar beet harvest had fallen to 538,490 tons. By 1995, private enterprises were responsible for the production of 13.7 percent of sugar beet in Lviv, up from zero in 1990.

Sunseed: Lviv produces only very small amounts of sunseed, one of the more popular cash crops in Ukraine. Any sunseed grown in Lviv is produced by private sector farmers. The amount is too small to be of statistical importance.

Farm incomes

Like most farm enterprises in Ukraine, the overwhelming majority of Lviv's agricultural enterprises are, according to official data, unprofitable. In 1997, 632 of 666 (95 percent) large agricultural enterprises were unprofitable, compared to 37 of 643 (6 percent) in 1994

Appendix I Assistance Matrix Summary